

Navigation System Firmware Improvement (Generation 6)

Service Category Audio/Visual/Telematics

Section Navigation/Multi Info Display

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2011 – 2012	CT200H	
2010 – 2012	ES350, HS250H, IS F, IS250, IS250C, IS350, IS350C, LS460, LS600H, LX570, RX350, RX450H	
2010 – 2011	GS350, GS450H, GS460	
2010 – 2013	GX460	
2012	LFA	
2010	SC430	

REVISION NOTICE

November 2, 2015 Rev2:

- The Repair Procedure section has been updated.

Any previous printed versions of this bulletin should be discarded.

October 2, 2014 Rev1:

- The Required Tools & Equipment and Repair Procedure sections have been updated.

Any previous printed versions of this bulletin should be discarded.

SUPERSESSON NOTICE

The information contained in this bulletin supersedes SB No. L-SB-0147-11.

- The Required Tools & Equipment and Repair Procedure sections have been updated.

Service Bulletin No. L-SB-0147-11 is Obsolete and any printed versions should be discarded. Be sure to review the entire content of this bulletin before proceeding.

Navigation System Firmware Improvement (Generation 6)

Introduction

NOTE

Do NOT perform a map update until this bulletin has been performed.

Certain 2010 – 2013 model year Lexus models may exhibit one or more of the following conditions:

- Steering wheel volume controls are intermittently inoperative.
- Navigation system region code intermittently will reset to region US9.
- XM NavTraffic® will not function properly after renewing XM traffic subscription.
- Slow response from Bluetooth® address book voice commands.
- Black screen condition after shifting from Reverse to Park.
- Air conditioning screen may not appear when changing blower speed.
- iPod® scrolling speed is slow.
- Display constantly shows "Calculating" on right side of screen while driving on freeway.
- Slow response at times from navigation system even at startup.
- GPS coordinates shown instead of destination address.
- Display locks up and appears unresponsive after periods of time.
- Touch screen (if equipped) functions are slow to respond.

Navigation firmware has been updated to allow updating map to version 10.1 or later. Updated navigation system software has also been developed to remedy these conditions. Use the following procedure to address these conditions.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL9014	Navigation OS Update	0.3	86271-0E010	87	74

APPLICABLE WARRANTY

- This repair is covered under the Lexus Comprehensive Warranty. This warranty is in effect for 48 months or 50,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

NOTE

This should be a labor claim only since navigation software is downloaded from TIS.

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Required Tools & Equipment

REQUIRED EQUIPMENT	QTY
PC with Windows® XP, Windows® 7, or Windows® 8 Operating System	1

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Navigation Update Tool Kit*	<u>95079-00003-KIT</u>	1
GR8 Battery Diagnostic Station*	<u>00002-MCGR8</u>	1

NOTE
Additional SSTs may be ordered by calling 1-800-933-8335.

* Essential SST.

Repair Procedure

Loading Navigation System Firmware onto Navigation Update Tool

NOTE
Navigation Update Tool **MUST** have the latest "Navigation Programs Installer" before performing this bulletin. For installation procedure, refer to Service Bulletin No. L-SB-0072-14, "HDD Navigation Program Setup."

1. Turn on PC.
2. Log into the Technical Information System (TIS).
3. Download the appropriate *Vehicle Navigation Software Update* from TIS.
 - A. Click on the *TIS* tab.
 - B. Click on the *Diagnostics* tab.
 - C. Click on the *Tools & Equipment* tab.
 - D. Click on the *Navigation* tab under *Tools*.
 - E. Click on the appropriate Generation 6 *Vehicle Navigation Software Update* under *Available Software Updates*.

NOTE
If the TIS division is NOT set to Lexus (under the *My Account* area), the *Navigation* tab will NOT display. Navigation Update is a Lexus ONLY TIS option at this time.

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Repair Procedure

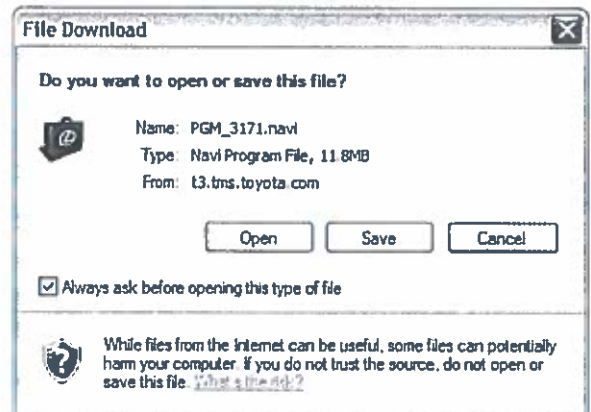
Loading Navigation System Firmware onto Navigation Update Tool (Continued)

4. Click *Open* to begin the download.

NOTE

The file is large and may take up to 10 minutes to download.

Figure 1.



5. Once the file is downloaded, prepare the vehicle for use with the Navigation Update Tool. Cover the GPS antenna in a manner where GPS satellite tracking is NOT present during the navigation software update process.

HINT

Park vehicle in a structure that blocks the GPS signal, or cover the GPS antenna with a metal panel.

6. Connect the Navigation Update Tool to the PC using the USB cable.
 - A. Make sure the USB cable is secured in **both** the PC and Navigation Update Tool USB ports.
 - B. Confirm that the Navigation Update Tool is powered correctly.
 - C. Turn the power ON.
 - D. Click *Continue*.

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Repair Procedure

Loading Navigation System Firmware onto Navigation Update Tool (Continued)

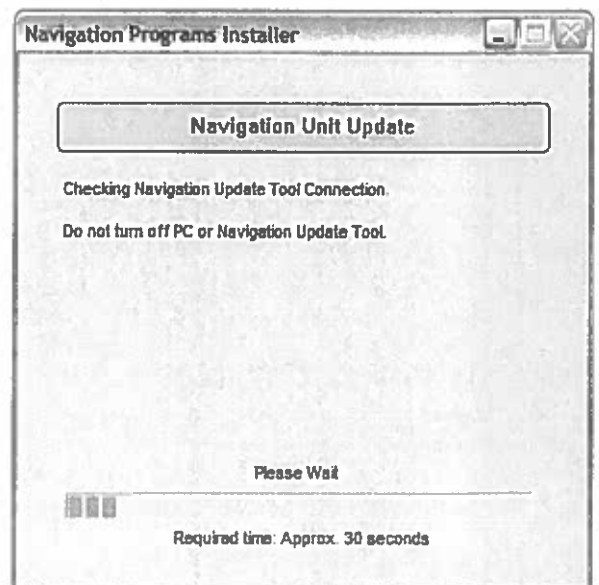
7. Verify that both the transfer mode display light (green) and power supply display light (blue) are lit, then click *Continue*.

Figure 2.



8. The software will perform a connection check with the Navigation Update Tool. In the event an error is shown, please recheck the USB connection.

Figure 3.



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Repair Procedure

Loading Navigation System Firmware onto Navigation Update Tool (Continued)

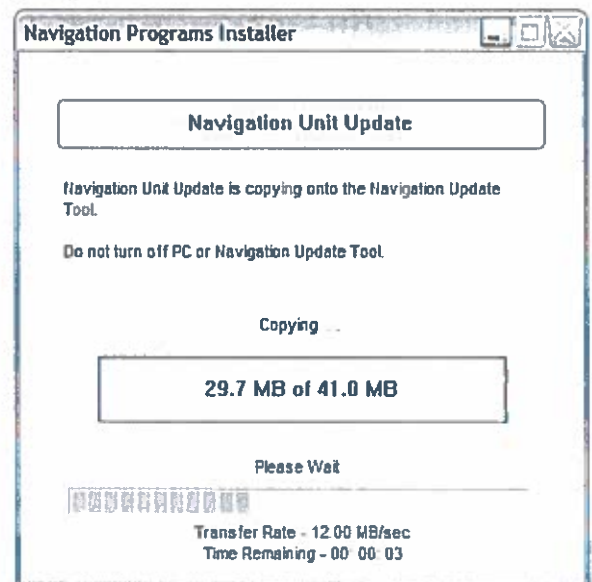
- Navigation Firmware is ready to be loaded onto the Navigation Update Tool, click *Continue*.

Figure 4.



- Navigation Firmware will now load onto the Navigation Update Tool.

Figure 5.



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Repair Procedure

Loading Navigation System Firmware onto Navigation Update Tool (Continued)

11. Once the Navigation Firmware is successfully loaded onto the Navigation Update Tool, click *Continue* to finish the installer.

Figure 6.



12. Disconnect the navigation tool from the PC.

Navigation System Firmware Improvement (Generation 6)

Repair Procedure (Continued)

Loading Navigation System Firmware into Vehicle Navigation System

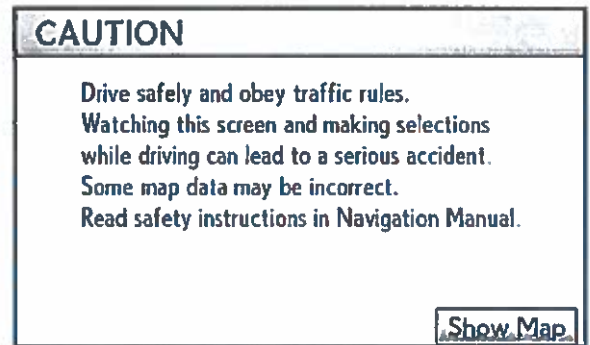
NOTE
 Vehicle ignition should be OFF before starting this procedure.

1. Connect the Navigation Update Tool to the vehicle (tool MUST be disconnected from the PC).
2. Connect the GR8 Battery Diagnostic Station to the vehicle.
3. Cycle the ignition ON (Engine/Hybrid/EV system OFF) and wait for the *Caution* screen to appear on the navigation display.

NOTE

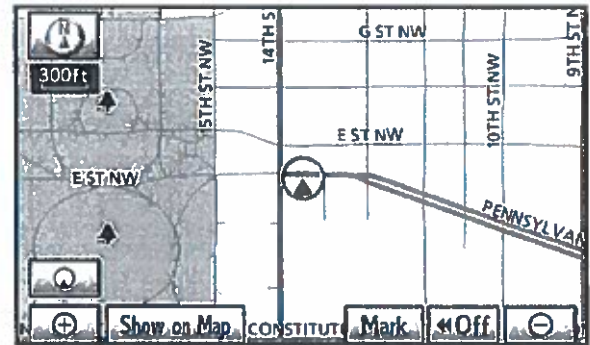
- Vehicles WITHOUT Smart Key system: Turn the ignition key to the "ON" position.
- Vehicles WITH Smart Key system: Press the "ENGINE START STOP" switch two times with the brake pedal released.

Figure 7.



4. Select *Show on Map*.

Figure 8.



5. Hold down the *Menu* button on the Remote Touch interface and turn the light switch from OFF to tail light position 3 or more times until the navigation system enters the diagnostic mode.

For touch screen vehicles (ES 350, IS 250C/350C, GS 350/450h/460, GX 460, LS 460/460L, LS 600hL, LX 570, SC 430):

Press the *INFO* switch and turn the light switch from OFF to tail light position 3 or more times until the navigation system enters the diagnostic mode.

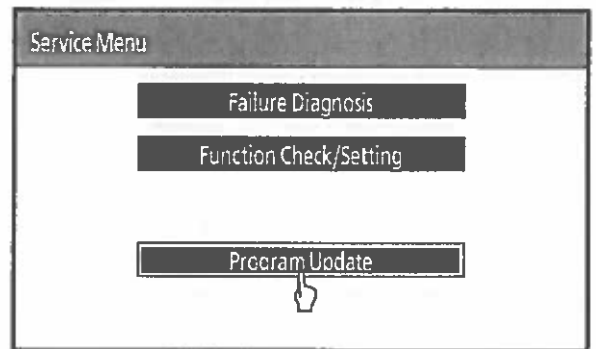
Navigation System Firmware Improvement (Generation 6)

Repair Procedure

Loading Navigation System Firmware into Vehicle Navigation System (Continued)

6. Select *Program Update* from the Service Menu.

Figure 9.



7. Select *OK*.

NOTE

Load time for the program update is between 5 and 15 minutes.

Figure 10.

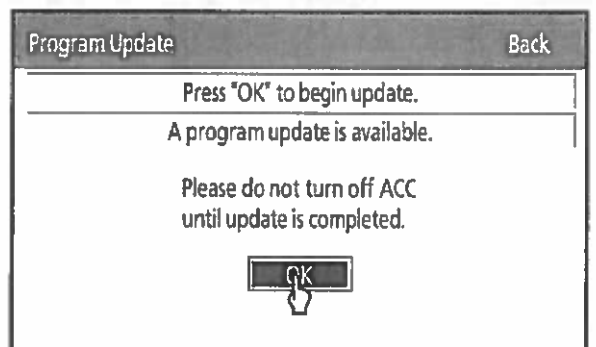
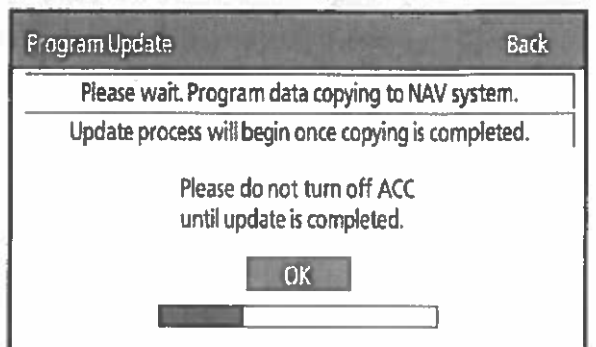


Figure 11.



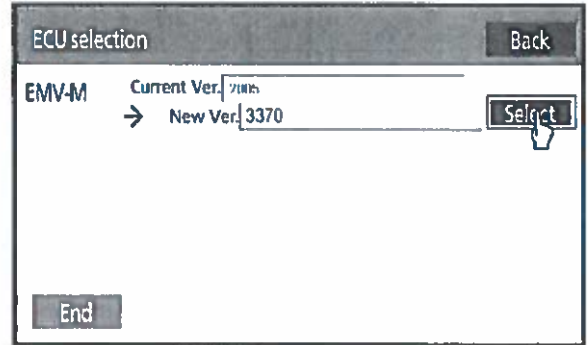
Navigation System Firmware Improvement (Generation 6)

Repair Procedure

Loading Navigation System Firmware into Vehicle Navigation System (Continued)

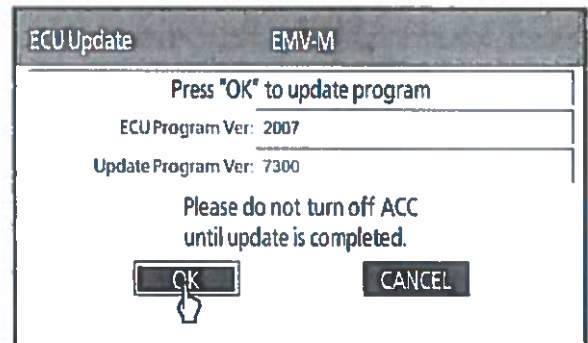
- When the *ECU Selection* screen appears, confirm the Current version is less than the New version. If yes, then press *Select*. If no, then select *End* and go to step 11.

Figure 12.



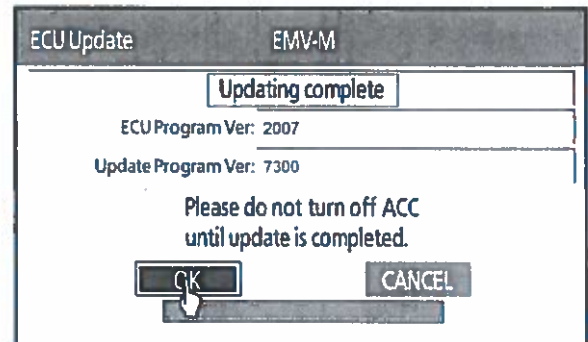
- When *EMV-M* screen is shown select *OK*.

Figure 13.



- After about 1 minute, if the update was successful the display will indicate "*Updating complete*" at the top of the screen. Select *OK* to continue.

Figure 14.



Navigation System Firmware Improvement (Generation 6)

Repair Procedure

Loading Navigation System Firmware into Vehicle Navigation System (Continued)

11. Confirm the current version matches one of those shown below. Select *End* to complete the procedure.

MODEL	CURRENT VERSION
HS 250h LFA RX 350 (2010 MY) RX 350 (TMMC, 2011 – 2012 MY) RX 450h (2010 MY)	C361
CT 200h RX 350 (TMK, 2011 – 2012 MY) RX 450h (TMK, 2011 – 2012 MY)	C471
ES 350 IS 250/350 IS 250C/350C IS F GX 460 LS 460/460L LS 600hL LX 570	C781
GS 350 GS 450h GS 460	C861
SC 430	C662

NOTE

If Current Version does NOT match one of those listed above, switch the vehicle OFF and start again at step 1 of this bulletin.

12. Cycle the Ignition OFF to finish the updating procedure.
13. Cycle the ignition ON (Engine/Hybrid/EV system OFF) and verify normal navigation system operation.

NOTE

- Vehicles WITHOUT Smart Key system: Turn the ignition key to the "ON" position.
- Vehicles WITH Smart Key system: Press the "ENGINE START STOP" switch two times with the brake pedal released.

Figure 15.

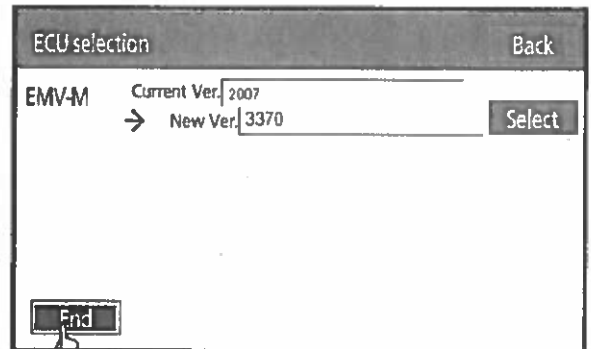
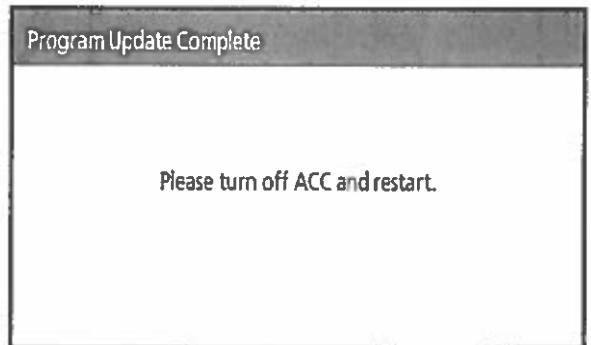


Figure 16.



Navigation System Firmware Improvement (Generation 6)

Repair Procedure

Loading Navigation System Firmware into Vehicle Navigation System (Continued)

14. Remove items that block the GPS antenna, or move to an area where GPS satellite reception is present.
15. Refer to TIS, *Diagnostics – Tools & Equipment – Navigation – Reference Documents* for the latest Navigation Map Update bulletin.